

Name: \_\_\_\_\_

### pa1030: Box multiplication of linear binomials (v6)

#### Example

Use the box method to multiply  $(6x + 3)$  and  $(2x + 4)$ .

*	$6x$	$3$	
$2x$	$12x^2$	$6x$	$12x^2 + 6x + 24x + 12$
$4$	$24x$	$12$	Combine like terms.
			$12x^2 + 30x + 12$

ANSWER:  $12x^2 + 30x + 12$

#### Question 1

Use the box method to multiply  $(6x + 3)$  and  $(9x + 5)$ .

*	$6x$	$3$	
$9x$	$54x^2$	$27x$	
$5$	$30x$	$15$	

ANSWER:  $54x^2 + 57x + 15$

### Question 2

Use the box method to multiply  $(4x - 9)$  and  $(-6x + 2)$ .

*	$4x$	$-9$
$-6x$	$-24x^2$	$54x$
$2$	$8x$	$-18$

ANSWER:  $-24x^2 + 62x - 18$

### Question 3

Use the box method to multiply  $(8x + 3)$  and  $(2x - 9)$ .

*	$8x$	$3$
$2x$	$16x^2$	$6x$
$-9$	$-72x$	$-27$

ANSWER:  $16x^2 - 66x - 27$